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| INFORMATION DISCLOSURE STATEMENT BY APPLICANT | | | | Application Number | 10/032,281 |
| (use as many sheets as necessary) | | | | Filing Date | December 21, 2001 |
| Sheet | 1 | of | 2 | First Named Inventor | WYRICK, JOHN |
| | | | | Group Art Unit | 1637 |
| | | | | Examiner Name | Fredman, Jeffrey Norman |
| | | | | Attorney Docket Number | 10050560-1 |

| U.S. PATENT DOCUMENTS | | | | | | |
|------------------------------|-----------------------|----------------------|-----------------------------------|---|--|---|
| Examiner Initials* | Cite No. ¹ | U.S. Patent Document | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number | Kind Code ² (if known) | | | |
| | A1 | 6,982,145 | | Mercola et al. | 01-03-2006 | |
| | A2 | | | | | |
| | A3 | | | | | |

| FOREIGN PATENT DOCUMENTS | | | | | | |
|---------------------------------|-----------------------|-------------------------|---|---------|--|---|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | | Country | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
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| | B1 | WO | 02/14550 | PCT | 02-21-2002 | |
| | B2 | WO | 04/053106 | PCT | 06-24-2004 | |
| | B3 | WO | 04/087965 | PCT | 10-14-2004 | |
| | B4 | WO | 04/097577 | PCT | 11-11-2004 | |
| | B5 | WO | 05/054461 | PCT | 06-16-2005 | |
| | B6 | | | | | |
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| | C1 | BAR-JOSEPH et al., "Computational discovery of gene modules and regulatory networks," Nature Biotechnology, 21(11):1337-1342 (2003) | | | | |
| | C2 | BIGLER et al., "Isolation of a Thyroid Hormone-Responsive Gene by Immunoprecipitation of Thyroid Hormone Receptor-DNA Complexes", Molecular and Cellular Biology, 14:7621-7632 (1994) | | | | |
| | C3 | BIGLER et al., Novel location and function of a thyroid hormone response element," The EMBO Journal, 14:5710-5723 (1995) | | | | |
| | C4 | BOTQUIN et al., "New POU dimmer configuration mediates antagonistic control of an osteopontin preimplantation enhancer by Oct-4 and Sox-2," Genes & Development, 12:2073-2090 (1998). | | | | |
| | C5 | COHEN-KAMINSKY et al., "Chromatin immunoselection defines a TAL-1 target," The EMBO Journal, 17:5151-5160 (1998) | | | | |
| | C6 | DEVEAUX et al., "p45 NF-E2 regulates expression of thromboxane synthase in megakaryocytes," The EMBO Journal, 18:5654-5661 (1997) | | | | |
| | C7 | GOULD et al., "Targets of homeotic gene control in Drosophila," Nature 348:308-312 (1990) | | | | |

| | | | |
|--------------------|--|-----------------|--|
| Examiner Signature | | Date Considered | |
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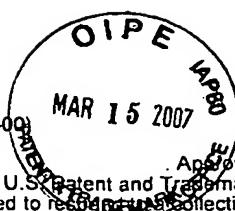
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| Sheet | 2 | of | 2 | Attorney Docket Number | 10050560-1 |

| OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | | | | | |
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| | C8 | GOULD et al., "Connectin, a target of homeotic gene control in Drosophila," Development 116:1163-1174 (1992) | | | |
| | C9 | GRABA et al., "Homeotic control in Drosophila; the scabrous gene is an <i>in vivo</i> target of Ultrabithorax proteins," The EMBO Journal 11:3375-3384 (1992) | | | |
| | C10 | GRABA et al., "DWnt-4, a novel Drosophila Wnt gene acts downstream of homeotic complex genes in the visceral mesoderm," Development 121:209-218 (1990) | | | |
| | C11 | GRABA et al., "Drosophila Hox complex downstream targets and the function of Homeotic genes," BioEssays 19(5):379-388 (1991) | | | |
| | C12 | GRANDORI et al., "Myc-Max heterodimers activate a DEAD box gene and interact with multiple E box-related sites <i>in vivo</i> ," The EMBO Journal 15:4344-4357 (1996) | | | |
| | C13 | HALLAHAN et al., "c-jun and Egr-1 Participate in DNA Synthesis and Cell Survival in Response to Ionizing Radiation Exposure," J. Biol Chem. 270(51):30303-30309 (1994) | | | |
| | C14 | HARTEMINK et al., "Combining location and expression data for principled discovery of genetic regulatory network models," Proceedings of the Pacific Symposium on Biocomputing, 437-449 (2002) | | | |
| | C15 | KOHWI-SHIGEMATSU et al., "Identification of Base-Unpairing Region-Binding Proteins and Characterization of Their <i>in Vivo</i> Binding Sequences," Methods of Cell Biology 53:323-354 (1998) | | | |
| | C16 | Lee et al., "Transcriptional Regulatory Networks in <i>Saccharomyces cerevisiae</i> ," Science, 298:799-804 (2002) | | | |
| | C17 | MUKHERJEE et al., "Rapid analysis of the DNA binding specificities of transcription factors with DNA microarrays," Nature Genetics, 36(12):1331-1339, (2004) | | | |
| | C18 | NICKERSON et al., "The nuclear matrix revealed by eluting chromatin from a cross-linked nucleus," Proc. Natl. Acad. Sci. USA 94:4446-4450 (1997) | | | |
| | C19 | ODOM et al., "Control of Pancreas and Liver Gene Expression by HNF Transcription Factors," Science, 303(5662):1378-1381 (2004) | | | |
| | C20 | ORLANDO et al., "Mapping Polycomb-Repressed Domains in the Bithorax Complex Using <i>In Vivo</i> Formaldehyde Cross-Linked Chromatin," Cell, 75:187-198 (1993) | | | |
| | C21 | ORLANDO et al., "Analysis of Chromatin Structure by <i>In Vivo</i> Formaldehyde Cross-Linking," METHODS: a Companion to Methods in Enzymology, 11:205-214 (1997) | | | |
| | C22 | PRADEL et al., "From selectors to realizers," Int. J. Dev. Biol. 42:417-421 (1992) | | | |
| | C23 | SCHOUTEN, The Journal of Biol. Chem. 260:9929-9935 (1985) | | | |
| | C24 | SOLOMON et al., "Formaldehyde-Mediated DNA-Protein Crosslinking: A Probe for <i>In Vivo</i> Chromatin Structures," Proc. Natl. Acad. Sci. USA 82:6470-6474 (October 1985) | | | |
| | C25 | TOMOTSUNE, "A mouse homologue of the Drosophila tumour-suppressor gene 1(2)gl controlled by Hox-C8 <i>In vivo</i> ," Nature 366:69-72 (1993) | | | |
| | C26 | WALTER et al., "Measurement of <i>In Vivo</i> DNA Binding by Sequence-Specific Transcription Factors Using UV Cross-Linking," METHODS: a Companion to Methods in Enzymology 11:215-224 (1997) | | | |
| | C27 | WEINMANN et al., "Isolating human transcription factor targets by coupling chromatin immunoprecipitation and CpG island microarray analysis," Genes & Development, 16:235-244, (2002) | | | |
| | C28 | WYRICK et al., "Deciphering gene expression regulatory networks," Current Opinion in Genetics and Development, 12:130-136, (2002) | | | |
| Examiner Signature | /Kenneth Horlick/ | | Date Considered | 05/27/2008 | |

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| | Filing Date | | 2001-12-21 |
| | First Named Inventor | | John Wyrick et al. |
| | Art Unit | | 1637 |
| | Examiner Name | | Fredman, Jeffrey Norman |
| | Attorney Docket Number | | 10050560-1 |

| U.S.PATENTS | | | | | | |
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| | Examiner Name | Fredman, Jeffrey Norman |
| | Attorney Docket Number | 10050560-1 |

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|------|---|--|--------------------------|
| /KH/ | 1 | Francis Barany, Title: "The Ligase Chain Reaction In A PCR World", Department Of Microbiology, Hearst Microbiology Research Center, Cornell University Medical College, New York, NY 10021, pp. 1-12. (1991) | <input type="checkbox"/> |
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| PTO-1449 REPRODUCED | | ATTORNEY DOCKET NO. 0399.1212-005 | APPLICATION NO. 10/032,281 |
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| JUN 29 2005 Use several sheets if necessary) | | EXAMINER Fredman, Jeffrey Norman | CONFIRMATION NO. 4057 |
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| U.S. PATENT DOCUMENTS | | | | |
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| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) | | |
|--|-----|--|
| /KH/ | AY2 | Zhu, G., et al., "Two Yeast Forkhead Genes Regulate the Cell Cycle and Pseudohyphal Growth," <i>Nature</i> 406:90-94 (July 2000). |
| /KH/ | AZ2 | Kumar, R., et al., "Forkhead Transcription Factors, Fkh1p and Fkh2p, Collaborate with Mcmlp to Control Transcription Required for M-Phase," <i>Curr. Biol.</i> 10(15): 896-906 (2000). |
| | AR3 | |
| | AS3 | |

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